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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,773	11/25/2003	Daniel F. Handman	3586.1000-001	4185

21005 7590 02/08/2007  
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.  
530 VIRGINIA ROAD  
P.O. BOX 9133  
CONCORD, MA 01742-9133

EXAMINER
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GEISEL, KARA E

ART UNIT	PAPER NUMBER
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2877

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/721,773	<b>Applicant(s)</b> HANDMAN ET AL.	
	<b>Examiner</b> Kara E. Geisel	<b>Art Unit</b> 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-22 and 24-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-20,41-44,46-52,59-61 and 65-68 is/are allowed.
- 6) ☒ Claim(s) 21,22,24-40,45,53-58 and 62-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments, see the amendment, filed November 20<sup>th</sup>, 2006 (pages 13-14), with respect to claims 1, 17, 21, 37, and 41-42 and their dependent claims have been fully considered and are persuasive. The rejection based on Thomas et al. in view of Stirland of these claims has been withdrawn.

However, upon further consideration, the indicated allowability of claims 40 and 45 is withdrawn, and a new rejection of claims 21-22, 24-40 and 45 is presented. Rejections based on 35 U.S.C. 101 follow.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-22, 24-40, 45, 53-58, and 62-64 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

These claims are directed to a process, which recites an abstract idea. This recitation falls within Section 101 Judicial exceptions - Abstract Ideas.

The claims are directed to a judicial exception; as such, pursuant to the Interim Guidelines on Patent Eligible Subject Matter (MPEP 2106), the claims must have either physical transformation and/or a useful, concrete and tangible result. In making this determination, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather on whether the **final result** achieved by the claimed invention is "useful, tangible, and concrete". The claims fail to include transformation from one physical state to another in the final step. Although, the claims appear useful and concrete, there does not appear to be a tangible result claimed. Merely determining (claim 21, line 5; claim 32, line 4; claim 37, line 11; claim 40, line 4; claim 45, line 4; claim 63, line 4), and processing

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(claim 27, line 1) would not appear to be sufficient to constitute a tangible result, since the outcome of the determining and processing step has not been used in a disclosed practical application nor made available in such a manner that its usefulness in a disclosed practical application can be realized. As such, the subject matter of the claims is not patent eligible.

The claims dependent on these claims, do not appear to solve the deficiency of these claims, and are therefore, also rejected under 35 U.S.C. 101.

*Allowable Subject Matter*

Claims 1-2, 4-19, 41-42, and 47-52 are allowed over the prior art of record for the reasons set forth in the amendment, filed November 20<sup>th</sup>, 2006, on pages 13-14.

Claims 20, 43-44, 46, and 59-61 are allowed over the prior art of record for the reasons set forth in the previous Office Action (paper number 0506).

Claims 21-22, 24-39, and 53-58 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action for the reasons set forth in the amendment, filed November 20<sup>th</sup>, 2006, on pages 13-14.

Claims 40, 45, and 62-64 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action for the reasons set forth in the previous Office Action (paper number 0506).

Claims 65-68 are allowed over the prior art of record.

The following is a statement of reasons for the indication of allowable subject matter:

As to claim 65, the prior art of record, taken alone or in combination, fails to disclose or render obvious an apparatus for determining changes in the shape of an object comprising an electromagnetic radiation source **coupled to the object**, the object being selected from the group consisting of **a building, a bridge, and a tower**, responses of sensors indicating angular orientation of a shaped beam with respect to an array, in combination with the rest of the limitations of claim 65.

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***Additional Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art made of record is Breecher et al. (USPN 4,334,775).

Breecher discloses an apparatus for determining changes in the shape of an object comprising an electromagnetic radiation source adjacent to the object, the object being selected from the group consisting of a building, a bridge, and a tower, the electromagnetic radiation emitting a shaped beam, and an array of reflectors coupled to the object to receive radiation from the radiation source and reflect radiation back to an array of electromagnetic radiation sensors, responses of the sensors indicating angular orientation of the shaped beam with respect to the array.

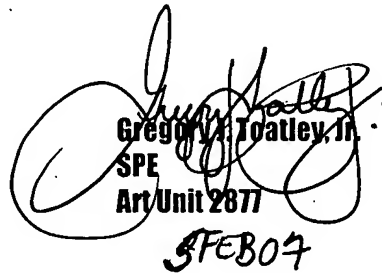
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kara E Geisel whose telephone number is **571 272 2416**. The examiner can normally be reached on Monday through Friday, 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on **571 272 2800 ext. 77**. The fax phone number for the organization where this application or proceeding is assigned is **571 273 8300**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Gregory A. Toatley, Jr.  
SPE  
Art/Unit 2877  
3 FEB 07

K.G.

KEG  
February 1, 2007